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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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08/30/2001

James M. Cisar

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02/09/2006

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EXAMINER

PARK, JUNG H

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,232

Applicant(s)

CISAR ET AL.

Examiner

Jung Park

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on January 18, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-8, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 11, & 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Remarks/Amendments

1. The amendment filed on January 19, 2006 has been entered and considered, but the amendment filed on January 18, 2006 is not entered. Regretfully, the indicated allowability of claims 1-3, 6-8 and 11-12 is withdrawn in view of the newly discovered reference(s) to Ishida (US Pub. 2001/0014588).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 3, 6, 8, 11, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishida (US Pub. 2001/0014588, "Ishida").

Regarding claim 1, Ishida shows a radio base station (Fig.1; *network access point*) performing a radio communication with one or more mobile stations (para.[0036], ln.1-3 *a plurality of clients*) over traffic channels (para.[0045] & [0043] *a plurality of carriers*) by using an array receiver (para.[0045] *adaptive array antenna*). A link channel establishment request is transmitted from a mobile to the base station through a control channel (para.[0045] *one dedicated carrier*) over an omni receiver (*omni-directional antenna*) for hand-over (para.[0044] *new clients*) seeking to access the network. The control unit (80 fig.1) in the base station detects a hand-over (para.[0044] *a new client*)

through one control channel in order for the new client to access the network (claim 1-
*detecting a new client over the at least one dedicated carrier, and associating the new
client to the network*).

Regarding claims 3 and 8, Ishida further shows in Fig.1, a signal processing unit
50 calculates parameters in order to form a directional pattern (para.[0041]; an adaptive
directional antenna is used) at a reception and a transmission.

Regarding claim 6, it is a claim corresponding to claim 1 except the means for
exchanging data with the clients with unselected carriers. Ishida further discloses in
para.[0043], the control unit controlling a traffic channel assignment request with unused
traffic channel (unselected carriers) from the control channels by using array receiver
(adaptive array antenna) in order to transfer data with mobile stations (exchanging data
with the clients).

Regarding claims 11 and 12, Ishida further discloses in para.[0044], "the link
channel establishment is issued for requesting a link and an assignment of a traffic
channel (communicating) through a controlling channel to change traffic channel during
a hand-over (monitoring). That is, the communicating and monitoring occur concurrently.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
are such that the subject matter as a whole would have been obvious at the time the invention was made to

a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida in view of Hohnstein et al. (US 6,816,706, "Hohnstein", a reference cited previously).

Regarding claims 2 and 7, Ishida fails to teach the communication method over OFDM. However, Hohnstein teaches that the access point (base station) uses many directional antennas (adaptive array antenna) or omnidirectional antenna for coverage area (col.4, ln.14-17) and the wireless link may be implemented by any access technology including CDMA, TDMA, FDMA, OFDM, analog, and the like (col.4, ln.31-35; claim 2 - a plurality of carriers comprising communicating over OFDM).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use adaptive array antenna or omnidirectional antenna over OFDM wireless link taught by Hohnstein to the wireless communication method disclosed by Ishida since one would be motivated to apply the omnidirectional antenna in order to radiate maximum power uniformly in all directional for control channel over OFDM.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung Park whose telephone number is 571-272-8565. The examiner can normally be reached on Mon-Fri during 7:10-4:40.

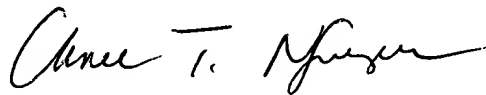
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JP

Jung Park
Patent Examiner
Art Unit 2661
February 3, 2006



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600